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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,242	03/30/2004	Roger G. Sellers	71024-576	4836
27305	7590	03/09/2006	EXAMINER	
HOWARD & HOWARD ATTORNEYS, P.C. THE PINEHURST OFFICE CENTER, SUITE #101 39400 WOODWARD AVENUE BLOOMFIELD HILLS, MI 48304-5151			AMIRI, NAHID	
			ART UNIT	PAPER NUMBER
			3679	

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/813,242

Applicant(s)

SELLERS ET AL.

Examiner

Nahid Amiri

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: exhibit.

DETAILED ACTION

Response to Amendment

In view of Applicant's Amendment received 13 December 2005, amendments to the claims have been entered. Claim 12 stand withdrawn from consideration. Claims 1-11 are pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 recites the limitation "said head portion" in lines 4-5. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,772,337 Maughan et al., in view of US Patent No. 2,635,906 Graham et al.

With respect to claims 1-6 and 9, Maughan et al. disclose a ball joint (20, Figs. 1-2, columns 2-3, lines 64-67, and lines 1-6) comprising a metal housing (22) having side wall (33) which defines a central bore (28) having a closed end and an open end; a metal lower bearing (26) disposed within said central bore (28); a movable member (50) having a head end portion (48) disposed in said central bore (28) and a shank portion (52) extending from said head end portion (48), the head end portion (48) engaging said metal lower bearing (26) in said central bore (28), said shank portion (52) being at least partially disposed outside of said central bore (28); an annular metal upper bearing (24) disposed about said movable member (50) within said central bore (28), said annular metal upper bearing (24) having an inner surface engaging said head end portion (48), an outer surface engaging said side wall (33), and a split segment (56) linking said inner surface with said outer surface; an annular cover plate (75) disposed about said movable member (50) and secured within said central bore (28); the metal housing (22) further include an axial lubrication port (36) disposed in the closed end of the central bore (28); wherein the annular metal upper bearing (24) is configured to engage the side wall and the head end portion (48) simultaneously; wherein the annular metal upper bearing (24) is capable of being axially displaceable within the central bore (28); wherein the metal lower bearing (26) is retained with the central bore (28) by an interference fit; and wherein the lower metal bearing (26) includes at least one lubrication slot (82) disposed on an inner bearing surface, and the annular metal upper bearing (24) includes at least one lubrication slot (56) disposed on an inner bearing surface. Maughan et al. do not teach a spring member compressed between the annular cover plate and an upper surface of the annular metal upper bearing; annular cover plate and said spring member are composed of metal. Graham et al. teach a joint ball (10, Fig. 3) having an annular metal cover plate (15), an annular upper bearing (13), and a metal spring member (14) compressed between the annular cover plate (15) and an upper surface of the upper bearing (13); (column 3, lines 48-50) wherein the spring (14) is capable of exerting an axial preload force on the annular metal upper bearing (13) towards the closed end of the central bore (28). It would have also been obvious to one of ordinary skill in the art at the time of invention was made to provide the ball joint of Maughane et al. with a spring member compressed between the cover plate and upper surface of the upper bearing as taught by Graham in order to urge the bearing wall of the bearing ring to maintain it against the ball end of the stud.

With respect to claim 10, Maughane et al. disclose (Fig. 2) the housing (22) includes a deformable annular region adjacent the open end of the central bore (28); and the deformable annular region adapted for radially inward deformation to secure the annular cover plate (75) within the central bore (28).

With respect to claims 11, Maughane et al. disclose a claimed invention except that the annular cover plate including a chamfered inner surface to restrict articulation of the movable member. It would have been an obvious matter of design choice to provide the annular cover plate of Graham with a chamfered inner surface in order to restrict the movement between the movable member and the housing, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maughane et al. and Graham et al. as applied to claims 1-6 and 9-11 above, and further in view of US Patent No. 5,997,208 Urbach et al.

With respect to claim 7, Maughane et al. disclose a claimed invention except for having a dust boot restrictor disposed about the shank portion. Urbach et al., teach (Fig. 1) having a dust boot restrictor (R, see attachment) disposed about the shank portion (12b-12d). It would have been obvious to one of ordinary skill in the art at the time of invention was made to provide the shank portion of Maughane et al. with a dust boot restrictor as taught by Urbach et al. in order to restrict the movement of the shank portion.

With respect to claim 8, Maughane et al. disclose a claimed invention except for having a flexible dust cover coupled between the housing and the shank portion of the movable member. Urbach et al., teach (Fig. 1) a flexible dust cover (60) coupled between the housing (12) and the shank portion (34) of the movable member (32). It would have been obvious to one of ordinary skill in the art at the time of invention was made to provide Maughane et al. with a dust cover as taught by Urbach et al., in order to seal the open upper end of the housing.


Response to Arguments

Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nahid Amiri whose telephone number is (571) 272-8113. The examiner can normally be reached on 8:30-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Nahid Amiri
Examiner
Art Unit 3679
February 28, 2005



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